REMARKS

Claims 1-18 and 22 are pending. By this Amendment no claims have been amended and no claims have been added.

Claim Rejections Under 35 USC § 103

Claims 1-17 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 7,065,236 to Marcelpoil et al. ("the '236 patent") in view of U.S. Patent 4,090,243 to Kotera et al. ("the '243 patent"). Claim 18 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 7,065,236 to Marcelpoil et al. ("Marcelpoil") in view of U.S. Patent 4,090,243 to Kotera et al. ("Kotera") and U.S. Patent Application Publication 2004101 14227 by Henderson et al. ("Henderson"). These rejections of claims 1-17, 22, and 18 are respectfully traversed.

Claims 1, 10, and 18 of the present application each generally require: 1) measuring a color channel value in a plurality of *control samples*... ; and 2) defining a vector for each of the plurality of *control samples*, wherein each vector comprises an average of each color channel value present in the control. Since no control samples are disclosed in the '236 Patent or '243 Patent, multiple limitations of these claims are not taught or rendered obvious in view of these references.

In prior Office Actions, this distinction is not properly acknowledged. Instead, it is merely asserted by the Examiner that the '236 Patent's disclosure of capturing an image with a camera of the *actual experimental sample* 500 somehow teaches measuring color channel values for *control samples*. (See for example, 12/31/08 Office Action, p. 3) The Examiner also contends that the optical density vector OD given by equations 3-5 and 6-8 in column 11 of the

'236 Patent somehow teaches defining a vector for control samples. (See for example, 12/31/08 Office Action, p. 3-4) Both assertions are made despite the fact that no control sample is mentioned in the '236 Patent and that the only sample used in that disclosure is the actual experimental sample. In response to Applicant's previous objections to this rationale, the most recent Office Action attempts to clarify, stating:

> Also, it is well known to one of ordinary skill in the art that equations comprise of variable and constant to model/define/characterize a realistic situation/scenario and thus equations can control a certain variables to generate outcomes of other.

(12/31/ 08 Office Action, p. 2). Applicant does not understand this statement. However, to the extent that the Examiner is again attempting to assert that using optical density equations and actual sample optical density determinations is equivalent to taking measurements from a plurality of control samples and defining vectors for each of the plurality of control samples, Applicant takes issue with such conclusions. Using an equation to obtain optical densities of an image of the actual sample is not the same as taking measurements of color channel values from control samples, and certainly does not render the claim limitations presented as obvious. The '236 patent disclosure simply does not teach measuring control channel values in a plurality of control samples and using these measurements to define a vector for each of the control samples.

This difference in procedure is important as the '236 patent uses an entirely different methodology that does not involve use of control samples. The Lambert-Beer law, upon which the '236 patent is based, is additive so that the optical density for the actual prepared sample in, for example, the red color channel, is the sum of the optical densities of all of the dyes in the prepared experimental sample, measured in the red color channel. This is distinct as compared to Applicant's disclosure of developing a vector of the average r, average g, and average b values

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of all pixels of *a control sample of one color/stain*, and developing such a vector for *each* control sample.

Moreover, although the term "sample" is utilized by the Examiner broadly in the Office Actions, there is a clear distinction between what a "control sample" is and what an actual "experimental sample" is, as these features are separately recited in claims 1, 10 and 18.

The '236 Patent also does not teach this use of control samples. Further, the Examiner has not attempted to set forth any interpretation of how the '236 Patent could be construed to include such a teaching.

It is required that the prior art reference (or references, when combined) must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP §2142. As noted above, the combination of the '236 patent and the '243 patent do not teach or suggest all the claim limitations in independent claims 1, 10 or 18.

With respect to claim 18, Henderson is cited for disclosing an automated slide loader for use with a microscope. However, Henderson does not make-up for the deficiencies of the combination of the '236 patent and the '243 patent. Therefore, the combination of the '236 patent, the '243 patent and Henderson still does not disclose all the elements of claim 18. Thus, claim 18 is non-obvious over the '236 patent in view of the '243 patent and Henderson. For at least the above reasons, independent claim 18 is allowable and non-obvious.

For at least the above-noted reasons, independent claims 1, 10, and 18 are allowable and are not obvious. Claims 2-9, 11-17, and 22 depend from claims 1 and 10, respectively, and are also allowable and not obvious. Reconsideration and withdrawal of the rejection of claims 1-18 and 22 are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

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